

LAVRENT'YEVA, Ye.V.

Program of latitude observations for Irkutsk and Poznan  
Observatories. Trudy Polt. grav. obser. 11:111-129  
'62. (MIRA 15:11)  
(Irkutsk—Latitude) (Poznan—Latitude)

LAVRENT'YEVA, Ye.V.; DVULIT, P.D.

Program of latitude observations for Ulan-Bator. Trudy Polt. grav.  
obser. 12:48-58 '63. (MIRA 16:9)  
(Ulan-Bator--Latitude)

LAVRENYUK, Boris Porfir'yevich; SULTANOVA, N., red.; YEGOROVA, I.,  
tekhn.red.

[Meeting flowers] Vstrecha s tsvetami. Moskva, Mosk.rabochii,  
1960. 82 p. (MIRA 14:2)  
(Flowers)

L 04303-67 EWT(1)/I-2 FDN/MM

ACC NR: AP6005388

(N)

SOURCE CODE: UR/0413/66/000/001/0139/0139

AUTHORS: Reka, Ya. D.; Khudyakov, Ye. D.; Chernobay, I. F.; Fenkel'shteyn, L. A.;  
Kultygin, N. S.; Lavrenyuk, N. A.

ORG: none

54  
BTITLE: A pneumatic drive direct-action pump pressure booster. Class 59, No. 177772  
(announced by Donets State Design-Construction and Experimental Institute of the  
Complex Mechanization of Mines (Donetskij gosudarstvennyj proyektno-konstruktorskiy  
i eksperimental'nyj institut kompleksnoj mekhanizatsii shakht))

SOURCE: Izobreteniya, promyshlennyye obratsty, tovarnyye znaki, no. 1, 1966, 139

TOPIC TAGS: water pump, high pressure pump, high pressure pneumatic device,  
hydraulic pressure amplifierABSTRACT: This Author Certificate presents a pneumatic drive direct-action double  
acting pump pressure booster. The device includes a pneumatic cylinder with a  
piston, two operating cylinders with pistons rigidly connected with the piston of  
the pneumatic cylinder, and a distributing valve which is repositioned with the aid  
of checking devices when the piston approaches the extreme piston (see Fig. 1).  
The design increases the lifetime of the pump. The piston of the pneumatic cylinder  
is equipped at its ends with blades for rotating the piston to a specified angle

Card 1/2

UDC: 621.651.002.54

L 04303-67

ACC NR. AP6005388

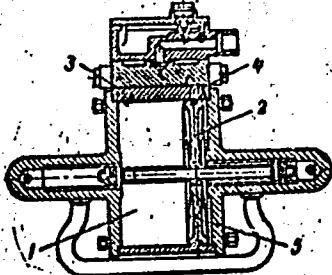


Fig. 1. 1 - pneumatic cylinder; 2 - piston; 3 and 4 - checking devices; 5 - blades

with each stroke. Orig. art. has: 1 figure.

SUB CODE: 13/

SURM DATE: 18Jan64

Card 2/2 of

ROMASHEVA, L.F.; KASIYEV, S.K.; SARTBAYEV, S.K.; KANIMETOV, A.K.;  
LAVRENYUK, N.M.

Treatment of poultry houses with different insecticides as a  
control measure against birdlice. Izv. AN Kir. SSR Ser.biol.  
nauk 4 no.4:99-111'62. (MIRA 16:6)  
(BIRDLICE—EXTERMINATION)  
(INSECTICIDES)



GROKHOVSKIY, A.A.; LAVRENYUK, V.A.

Automatic digestion pipette equipped with an electromagnetic regulator. Sakh.prom.34 no.5:35-36 My '60. (MIRA 14:7)

1. Smelyanskiy tekhnikum pishchevoy promyshlennosti.  
(Sugar manufacture)  
(Testing laboratories--Equipment and supplies)

LAVRENYUK, Yu.A.

PHASE I BOOK EXPLOITATION 474

Kartsev, M.A., Aleksandridi, T.M., Knyazev, V.D., Tanetov, G.I.,  
Legezo, L.S., Lavrenyuk, Yu.A., Shchurov, A.I., Brusentsov, N.P.,  
Kuznetzova, V.P.

Bystrodeystvuyushchaya vychislitel'naya mashina M-2 (High-speed  
Computer M-2) Moscow, Gostekhizdat, 1957. 228 p. 10,000 copies  
printed.

Ed. (title page): Bruk, Isaak Semenovich, Corresponding Member,  
USSR Academy of Sciences; Ed. (inside book): Bezborodov, Yu. M.;  
Tech. Ed.: Gavrilov, S.S.

PURPOSE: The book is written for engineers and students of vuzes,  
specializing in computer techniques, and for specialists interested  
in computer applications.

COVERAGE: The book describes the M-2, a small-dimensioned, universal,  
high-speed digital computer developed by the Laboratory of Control  
Machines and Systems of the Academy of Sciences, USSR. A detailed  
description is given of the basic computer units: the arithmetic

Card 1/13

High-speed Computer M-2

474

unit, internal memory devices, control devices and output devices. This description is supplemented with an exposition of the guiding principles of computer design, the binary system, coding and programming, and the design of basic components of the system. This makes the book accessible to readers who have no special training in electronic computers. The basic characteristics of the computer are as follows: the calculation system is binary; the code presentation is with a floating and fixed binary point; the number of binary digits is 34; the computation accuracy, with a floating binary point, is about eight decimal bits, and with a fixed binary point, about ten decimal bits (computations with doubled accuracy are also possible); the range of numbers in operations with a floating binary point is from  $2^{31}$  to  $2^{-32}$ ; the coding system is a three-address code; operations performed are: addition, subtraction, multiplication, division, congruence with modulus, algebraic congruence, logical (signed) multiplication, sign inversion, transfer of numbers, and auxiliary operations (30 in all); the average speed of operation is

Card 2/13

High-speed Computer M-2

474

2000 operations per second. Of the internal memory devices the basic one is electrostatic, consisting of cathode-ray tubes of the 13L037 type, for 512 numbers; the access time is  $25 \mu\text{sec}$ ; the auxiliary consists of a magnetic drum for 512 numbers; the speed of rotation is 2860 rpm. The external memory device consists of a magnetic tape with a capacity of 50,000 numbers; its length is 600 m and speed 0.4 m/sec. The data is fed in on perforated paper tape at the rate of about 30 numbers per sec. The decoding of data is in tabular form, the printing speed is 24 numbers per min. The power supply is from a 3-phase a-c metwpri 127/220-v, the power intake is 29 kw. The area covered by the computer is 22 sq. m. The total number of tubes is 1879, of which 1676 are used in the computer itself and 203 in the power supply. The types and numbers of tubes used in every unit are given in Appendix 2. The personnel consists of two people per shift. The cost of building the computer was about one million rubles, and the cost of 24-hr operation is 16,000 to 18,000 rubles per month. The various stages of development of the M-2 involved

Card 3/13

High-speed Computer M-2

474

the following engineers: M.A. Kartsev, V.V. Belinskiy and A.B. Zalkind, who developed the arithmetic unit; the electrostatic memory device was developed by T.M. Aleksandridi and Yu.A. Lavrenyuk; control devices by L.S. Legezo, V.D. Knyazev and G.I. Tanetov; magnetic memory devices by A.I. Shchurov and L.S. Legezo; input and output devices by A.B. Zalkind; the power supply system by V.V. Belynskiy, Y.A. Lavrenyuk and V.D. Knyazev; the control panel by V.V. Belynskiy and A.I. Shchurov. The design work was supervised by M.A. Kartsev. The following laboratory constructors, technicians, mechanics and assemblymen also worked on the project: I.Z. Gel'fgat, A.D. Grechushkin, N.A. Nemtsev, F.F. Rzheutskiy, I.K. Shvil'pe, D.U. Yermochenkov, L.I. Fedorov, and G.I. Korostylev. The following persons collaborated in the writing of the book: M.A. Kartsev (Chapters I to VI and XI), I.M. Aleksandridi (Chapter VII), V.D. Knyazev (Chapters II, III, VII and IX), V.P. Kuznetsova (Chapter XII), Yu. A. Lavrenyuk (Chapters V and VII), G.I. Tanetov (Chapters VI, IX and XIII), A.I. Shchurov (Chapter VIII), N.P. Brusentsov (Chapters VIII, IX, XIV) and L.S. Legezo (Chapter X).

Card 4/13

LAVRENYUK, Yu. A.

PAGE I BORN EXPLOITATION 30V/3671

Institut elektronicheskikh upravlyayushchikh mashin  
Akademii nauk SSSR.  
Triforovaya tekhnika i vychislitelnyye ustroystva. [Shortcrash collection of articles]  
(Digital Technique and Computing Devices. Collection or articles)  
Mashin. Tekhnika i Vychislitelnyye ustroystva. [Shortcrash collection of articles]  
Moscow. Izd-vo AN SSSR. 1959. 184 p. Errata slip inserted.

EA. I. M. S. Brok, Corresponding Member, USSR Academy of Sciences;  
Editor of Publishing House: G.Yu. Shteynbo; Tech. Ed.: V.V.

**PURPOSE:** This collection of articles is intended for persons specialising in computer techniques.

**COVER.** Most of the work in the field of Electronic Control Machines of Articles of the Institute of Electronic Control Machines of the Academy of Sciences, USSR, was carried out during 1958-1959. The Institute conducted studies aimed at creating a high-speed memory device of large capacity. One of the results of this work was improvement of the possibility by replacing its static storage device with ferrite memory cores. Other articles concern the use of transistors in digital computers, stability of analog computers equipped with operational amplifiers, and the use of the M-2 computer in solving various problems. Future issues of this collection will present the results of work in digital techniques in mathematical investigations, and in control machines and systems of control which operate on the principle of digital technique. Some personalities are mentioned in the articles.

**128**  
**Geometrical and Self-Admittances of Multibranch Electrical Networks and**  
**Digital Computers**. Calculations of the Distortion of Electric Powers in Long Distance Transmission Lines With Electronic Digital Computers. The authors describe the procedure adopted for this calculation, which they invented, with the help of the M-2 digital computer, the problem of electronic computer voltage regulation, in which a finitely large number of step-down substations is used along the transmission lines. All Soviet.

and 5 English.  
Bruino, A.I., and Yu.A. Artyukhina. Operation of the K-2 Electronic Digital Computer [Brief Report]. This is a report concerning the operation of the K-2 and results obtained from it in the Period 1953-1958.

Kazakov, M.A., V.D. Anufriev, and V.P. Kunetsova. High-Speed Electrostatic Printing Device. The authors describe an experimental model of an electrostatic parallel printing device developed at the Laboratory in 1956-1957.

The printer's ready to go.

REYNOLDS, M.O., and V.A. TRUTZYKIN. Ferrite-Transistor Trigger. 179  
With One Transistor. The authors describe the trigger device which they developed at the Laboratory. They compare it with a similar one-transistor trigger described in the IEE Proceedings, 1956, No. 3, enumerating the advantages of this particular trigger and the advantages of their trigger. There is one English reference.

**QALINKER, E.I.** Decimal Counter Equipped With Permite-Transistor Triggers. The author describes a counter in which the four column triggers of a binary counter with feedback was applied. This scheme may find application as an integrating device for decimal frequency division in systems of pulse automation and computing technique, and also in nuclear electronics. [3]

APPROVED FOR RELEASE: 06/20/2000

**CIA-RDP86-00513R000928820011-0"**

LAVRESHIN, Boris Yefimovich; ASTAKHOV, A.V., otv.red.; KONDRAT'YEVA,  
M.A., tekhn.red.

[ShBM-2 drilling combine] Prokhodcheskii kombain ShBM-2.  
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu,  
(MIRA 13:5)  
1960. 217 p. (Boring machinery)

VLASOV, S.N.; LAVRESHIN, Yu.V.

Centralized procurement of dry mix for delivery by pumping. Transp.  
stroi. 13 no. 7:18-20 Jl '63. (MIRA 16:9)

1. Glavnnyy inzh. Baktonnel'stroya (for Vlasov).  
(Cement plants)

FILIP'YEV, Yuriy Aleksandrovich; LAVRETSKIY, A., doktor fil.  
nauk, otd. red.; KLYAUS, Ye.M., red.izd-va; MATYUKHINA,  
L.I., tekhn. red.

[Creativity and cybernetics] Tvorchestvo i kibernetika.  
Moskva, Izd-vo "Nauka," 1964. 78 p. (MIRZ 17:3)

41309

S/035/62/000/010/124/128  
A001/A101

160550

AUTHOR: Lavretskiy, I. V.

TITLE: Extension resistance thermometers for measuring temperature gradients of air

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 45,  
abstract 10G239 ("Nauchn. zap. L'vovsk. politekhn. in-t. Ser. geod.",  
1962, no. 7, 54 - 61)

TEXT: The author notes the importance of studying air temperature distribution along the sighting line in connection with development of electric-optical methods of distance measurements, as well as for investigating vertical and side refraction. An extension resistance thermometer constructed at the Geodesy Department of the L'vov Polytechnic Institute is described. The thermometer is designed according to the bridge system; a thermal receiver (pickup), which is a coil of copper wire (coil resistance is ~ 52 ohm at 10°C), is connected into one of the arms; a resistance box is connected into the other arm; the third and the fourth arms are formed by equal constant resistances. Seven different

Card 1/2

Extension resistance thermometers for...

S/035/62/000/010/124/128

A001/A101

pickups can be connected in turn into the circuit. Air temperature measurement is reduced to measuring the resistance of a pickup, which varies linearly with temperature. The author describes in detail derivation of pickup equation (dependence of its resistance upon temperature) from measuring its resistance at various temperatures. Calibration of pickups must be repeated periodically for the control of their constants. The basic electric circuit of the bridge and information on pickup design are presented. The pickup weight, together with a duralumin protecting hood, amounts to 200 g. In view of low inertness of the pickup (inertness coefficient is equal to 50 sec at a wind velocity of 0.3 m/sec), the author proposes to bring the bridge, in measurements, to equilibrium approximately and to determine the exact value of pickup resistance with allowance for deviation of the galvanometer pointer from zero and for the value of a galvanometer scale division. Theoretical calculations and experimental measurements show that accuracy of temperature measurements with the device described amounts to 0.1 - 0.2°C. A radiation error is an intrinsic property of the pickup, which may amount to 1°C at a wind velocity of 0.2 - 0.5 m/sec.

[Abstracter's note: Complete translation]

M. Ratynskiy

Card 2/2

LAVRETSKIY, L. N.

Buildings, Prefabricated

Practice in organizing a factory for prefabrication of houses. Konstr. i mat. no. 6, 1950.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

LAVRETSKIY, L.N.

~~Building roads with a reinforced concrete surface. Les.prom.~~  
35 no.4:17-18 Ap '57. (MLRA 10:5)

1. Glavnyy inzhener tresta Kotlasbunstroy.  
(Forest roads)

LAVRETSKIY, L.

New trends in Soviet architecture. Tekh delo 13 no.429:3  
2 Je '62.

1. n-k "Optino-pokazatelno stroitelstvo" v Moskva.

LAVRETSKIY, L.N.

Putting a flat roof on an industrial building. Prom. stroi. 40  
no.3:12-15 '62. (MIRA 15:3)

1. Trest Mosstroy No.5.

(Roofs)

LAVRETSKIY, L.N., inzh.

Some results of the construction of a new type of industrial building in Moscow. Prom. stroi. 40 [i.e. 41] no.4:6-8 Ap '63. (MIRA 16:3)

1. Moskovskiy gosudarstvennyy stroitel'nyy montazhnyy trest 1-go Obshchestroitel'nogo territorial'nogo upravleniya Glavmosstroya Moskovskogo ispolnitel'nogo komiteta.  
(Moscow—Industrial buildings—Design and construction)

LAVRETSKIY, L.N., inzh.; MAREYEV, V.K., inzh.

Effective way of thawing frozen soil. Prom.stroi. 42 no.11:25-27  
N '64. (MIRA 18:8)

1. Test Mosstroy No.5.

ZHUKOV, M.; LAVRETSOV, Ye.

Why some enterprises of the Karelian Economic Council are un-profitable. Fin. SSSR 22 no.4:37-39 Ap '61. (MIRA 14:4)

1. Starshiye kontrolery-revizory Kontrol'no-revizionnogo up-ravleniya Ministerstva finansov RSFSR po Karel'skoy ASSR.  
(Karelia—Sawmills—Finance)

LAVREV, A.N., zasluzhennyj uchitel' shkoly RSFSR

Impressions of biology teaching in Czechoslovak schools. Biol. v  
shkole no.5:63 S-0 '58. (MIRA 11:11)

1. Chlen-korrespondent APN RSFSR.  
(Czechoslovakia--Nature study)

YUGOSLAVIA

Slavko RAKOVEC, Surgical Clinic of Medical Faculty of University  
(Hirurska klinika Medicinske fakultete Vseucilisca), Head (Upravnik):  
Academician Prof Dr Bozidar LAVRIC, Ljubljana; and Stanoje PAVLOVIC,  
Department of Obstetrics and Gynecology of General Hospital (Ginekolosko  
akusersko odeljenje Opste bolnice), Chief (Nacelnik) Dr Stanoje PAVLOVIC,  
Zajecar.

"Case of Utero-Placental Apoplexy in the Eighth Month of Pregnancy and  
Accompanied by Anuria."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol. 91, No 1, Jan 63;  
pp 73-77.

Abstract [French summary modified]: Interesting report of severe case  
in girl aged 19. After removal of dead fetus and transfusion, poor  
condition, progressive renal shutdown, all therapy failed, anuria and  
high azotemia, critical hyperkalemia. Emergency transportation from  
Zajecar to the artificial kidney installation at the Urology Clinic  
in Ljubljana (well over 900 Km.!) where first hemodialytic procedure  
eliminated 67.7 Gm. urea and 4.36 Gm. K; a second hemodialysis was  
1/2

LAVRIC, B.

LAVRIC, B.; KOSAK, N.; MAHKOTA, S.

Aortic coarctation and its surgical treatment. Zdrav. vest.,  
Ljubljana 23 no.3-4:61-68 1954.

1. Kururgicna klinika Medicinske visoke sole v Ljubljani (predstojnik  
prof. dr. Bozidar Lavric)- Interna klinika Medicinske visoke sole  
v Ljubljani (predstojnik prof. dr. Igor Tavcar)  
(COARCTATION OF AORTA, surg.)

\*

LAVRIC, Bozidar

Danger of the so-called exploratory punctures and their diagnostic value. Zdrav. vest., Ljubljana 23 no.7-8:138-141 1954.

1. Kirurgicna klinika Medicinske visoke sole v Ljubljani,  
predstojnik prof. dr. Bozidar Lavric.  
(PUNCTURES  
diag. value & hazards)

LAVRIC, B.

Some of our views on surgical treatment of cancer. Acta chir.  
Iugosl. 2 no.1:2-12 1955.

1. Kirurska klinika Medicinskog fakulteta u Ljubljani (predstojnik  
prof. dr Bozidar Lavric)  
(NEOPLASMS, surg.  
indic.(Ser))

GOLDMAN,S.; LAVRIC,B.; FURIAN,T.; PAPO,I.; STUDIC,J.; BENEDIK,M.; CESTNIK,I.

Results of surgical therapy of pulmonary tuberculosis with special  
reference to pulmonary resection. Tuberkuloza, Beogr. 11 no.2:147-  
166 '59.  
(PNEUMONECTOMY)

LAVRIC, Jozef

Chem Ab v48  
1-26-54  
Foods

✓ Albumin in our (Slovenia) fodder balance. II. Jozef  
Lavrič, Nova Proizvodnja 3, 199-205(1951).—Slovenia is  
very short in high-grade albuminous fodders. A survey is  
given of the methods employed abroad to prevent losses in  
the nutritive value of the crops in harvesting by means of  
accelerated harvest and artificial drying. An account of  
crop rotation which yields more albuminous substances is  
given. J. Rovtar Leach

LAVRIC, J.

Yugoslavia (430)

Technology

The lack of albumin in our fodder balance. p. 39,  
Nova Proizvodnja, Vol. 2, no. 1/2, February 1952.

East European Accessions List. Library of Congress,  
Vol. 2, no. 3, March 1953. UNCLASSIFIED.

LAVRIC, J.

Yugoslavia (430)

Technology

The lack of albumin in iur fodder balance. Part 2.  
p. 199, Nova Proizvodnja, Vol. 2, no. 3, May 1952.

East European Accessions List., Library of Congress,  
Vol. 2, No. 3, March 1953. UNCLASSIFIED,

LAVRIC, T.

"Methods of infrared spectroscopy in chemical analysis" by Ivo  
Kössler. Reviewed by T. Lavric. Rud met zbor no.1:50 '62.

LAVRIC, T.

"The new polarographic methods" by Helmut Schmidt and Mark v.  
Stackelberg. Reviewed by T. Lavric. Rud met zbor no.1:83  
'62.

LAVRIC, T.

"Introduction to the experimental spectrochemical analysis" by  
Heinrich Scheller. Reviewed by T. Lavric. Rud met zbor no.1:  
85 '62.

LAVRIC, T.

"Analytic qualitative chemistry" by Arnost Okac. Reviewed by  
T. Lavric. ~~Rud met zbor no.1:50 '62.~~

LAVRIC, Vito

LAVRIC, Vito, doc. dr.

The tasks of the general practitioner in urgent gynecological cases. Med. glasn. 8 no.3-4:109-112 Mar-Apr 54.

1. Ginekolosko-akuserska klinika Medicinskog fakulteta u Ljubljani  
(upravnik prof. dr. P. Lunacek)  
(GYNECOLOGICAL DISEASES, ther.  
\*role of GP)

LAVRIC, Vito, Dr. (Ljubljana)

Midwives in Yugoslavia. Narodno zdrav. Beogr. 11 no.7-8:228-235  
'55.

(MIDWIVES,  
in Yugosl., statist., educ. & legisl. (Ser))

~~LAVRIC, Vito~~

Importance of manifestation dispensary for women in a school for  
midwives. Higijena, Beogr. 9 no.2-3:179-182 1957.

(MIDWIVES, educ.

in Yugosl., dispensary for pregn. women (Ser))

LAVRIC, Vito, prof., dr

Garclage, Med. glas. 15 no.3:125-130 Mr '61.

1. Klinika za zenske bolesti i porodaje u Ljubljani (Predstojnik:  
prof. dr F. Novak)

(ABORTION ther)

[ YUGOSLAVIA ]

LAVITC, Vito, M.D., professor in the Department of Obstetrics and Gynecology at the Medical School in Ljubljana, Yugoslavia (Ginekologo-akusarska Klinika).

"Nutrition During Pregnancy and Lactation from the Aspect of Mother and Child Protection"

Belgrade, Narodno Zdravlje, Vol 26, No 12, 1962, pp. 401-409.

Abstract: Problems of nutrition are discussed with special emphasis regarding pregnant women and nursing mothers. Current tests conducted on nutrition indicate qualitative deficiency in animal proteins, calcium, liposoluble vitamins, and the vitamin C. The criteria for correct nutrition during pregnancy and lactation, and the significance of the individual food elements for the mother and child are evaluated.

Three chart-form tables are given. 18 references; 13 Yugoslav, 4 English, 1 French.

1/1  
[ ]

LAVRIC, Vito

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: [not given]

Affiliation: Clinic for Gynecology and Obstetrics (Klinika za Ginekologijo in Porodnistvo), Ljubljana; Director (Predstojnik):

Source: Prof Dr F Novak

Ljubljana, Zdravstveni Vestnik, Vol XXX, No 1-1, 1961, pp 30-31

Data: "The Ectopic Pregnancy."

FURMAN, M.S., doktor khim.nauk; GOL'DMAN, A.M., kand.nauk; OLEVSKIY,  
V.M., kand.tekhn.nauk; RUCHINSKIY, V.R.; Prinimali uchastiye:  
ROZENFEL'D, I.M.; LAVRICHENKO, A.A.; VAYSMAN, I.L.;  
ZHITNIKOVA, N.K.

Catalytic oxidation of cyclohexane by air under pressure  
by the continuous method. Khim.prom. no.4:265-272  
Je '60. (MIRA 13:8)

(Cyclohexane) (Oxidation)

LAVRICHENKO, M. V.

Impoverishment and ruin of peasantry in capitalist, colonial and dependent countries  
Moskva, Znanie, 1954. 39 p. (Vsesciuuznoe obshchestvo po rasprostraneniuu politicheskikh i nauchnykh znanii. Ser. 2, 1954, no. 23)

LAVRICHENKO, Mikhail Vasil'yevich; RABINOVICH, M., red.; TROYANOVSKAYA, N.,  
tekhn. red.

[Economic cooperation of the U.S.S.R. with Asian, African and  
Latin American countries] Ekonomicheskoe sotrudничество СССР  
so stranami Azii, Afriki i Latinskoi Ameriki. Moskva, Gos.izd-vo  
polit.lit-ry, 1961. 142 p. (MIRA 14:12)  
(Russia--Foreign economic relations)  
(Underdeveloped areas)

S/112/60/000/009/002/006

Translation from: Referativnyy zhurnal, Elektrotehnika, 1960, No. 9, p. 214,  
# 4.7758

AUTHORS: Bakinovskiy, V. L., Lavrichenko, Ye. K.

TITLE: Electronic Phase Meter

PERIODICAL: Tr. Vses. n.-i. in-ta electroenerg. 1959, No. 8, pp. 243-248

TEXT: The electronic phase meter to test synchronous generators is composed of a two-channel circuit. Each channel of the phase meter has a unit for two-sided clipping of the input voltage. In one of the channels, a trigger is mounted for dividing the signal frequency by 2, which extends the range of angular measurement to  $360^{\circ}$ . Then the pulses of both the channels are transformed by a thyratron rectifier into rectangular pulses the duration of which is in proportion to the measured angle. In order to obtain a continuous recording of the phase shift angle by the loop oscilloscope, a converter unit is included in the device, in which the rectangular current pulses are transformed into d-c, the magnitude of which is proportional to the phase shift of the control voltage.

M. S. K.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

✓

LAVRIK, A.

Miners' "Matsesta." Okhr. truda i sots. strakj. 5 no. 6:23 Je '62.  
(MIRA 15:7)

1. Doverenny v rach L'vovskogo oblastnogo soveta profsoyuzov.  
(Lvov Province--Labor rest homes)

LAVRIK, A.P.

Asymptotic formula for the additive theory of numbers. Dokl. AN  
Uz. SSR no.1:9-14 '57. (MIRA 11:5)

1.Tashkentskiy gos. pedagogicheskiy institut im. Nizami. Predstavlene  
akad. AM UzSSR T.Z. Sarymsakovym.  
(Numbers, Theory of)

LAVRIK, A.F.

AUTHOR: Lavrik, A.F. 20-3-5459

TITLE: Representation of Numbers in the Form of a Sum Composed of a Simple Number and a Power of an Assumed Integer Number. (O predstavlenii chisel v vide summy prostogo chisla i stepeni zadannogo tselogo chisla)

PERIODICAL: Doklady Akad.Nauk,SSSR, 1957, Vol. 115, Nr 3, pp.445-446 (USSR)

ABSTRACT: This paper studies the representation of natural numbers in the form  $n = p + a^i$ , where  $a$  signifies a simple number. In this connection  $a \geq 2$  is an integer number and  $i \geq 0$  is integer. The author gives altogether 5 theorems: Theorem 1: The interval  $(0, x)$  contains more than  $ax/\lg a$  numbers which can be represented in one and the same manner in the form of a sum of a simple number and the power of an assumed integer number  $\geq a_0$ . In this connection  $a$  signifies a positive absolute constant. Theorem 2: An integer number exists that is not dependent on  $x$  and  $a$ , so that the amount of the numbers  $n \leq x$  (for which the equation  $n = p + a^i$ ,  $i=1,2,\dots,k$  solutions) is larger than  $\sqrt{x}/\log a$ . In this connection  $p$  is a simple number,  $a \geq 2$  an assumed integer number,  $i \geq 0$  an integer number and  $\sqrt{x} > 0$  is a constant. With the same designations ( $p \leq x$  - integer number,  $a^i \leq x$ ,  $F(x)$  - quantity of numbers  $n \leq 2x$ , for which  $\Psi(n,x) = m$  applies,  $m > 0$  integer number,  $k$  - any straight positive number,  $\Psi_k(x) = F_1(x) + \dots + F_k(x)$  the following applies. Theorem 3: When  $\Psi(n,x)$  is the number of the solutions of the equations  $n = p + a^i$ ,

Card 1/2

20-3-5/59

Representation of Numbers in the Form of a Sum Composed of a Simple Number and a Power of an Assumed Integer Number.

$$\phi_k(x) \approx \frac{4kx}{(k+1)^2 \lg a} \left( 1 - \frac{c_1 \lg^3 \lg 2a}{k \lg a} - \frac{c_2}{\lg x} \right) \text{ applies. In}$$

this connection  $c_1$  and  $c_2$  are positive absolute constants. Theorem 4: An infinite amount of the numbers  $n$  exists for which (with the same designations as in theorem 3) when  $x \rightarrow 0$  the inequation  $\Psi(n, x) > \delta \lg \lg n$  is valid, where  $\delta > 0$  signifies a certain constant. Theorem

5: When  $\psi(x)$  is any positive function which infinitely increases in the case of  $x \rightarrow \infty$  and when  $M(x)$  is the amount of the numbers  $n \leq x$ , for which  $\Psi(n, x) > \psi(x)$  applies, then  $M(x) = O(x)$  is valid. There are 4 references, 2 of which are Slavic.

ASSOCIATION: State Pedagogical Institute imeni Nizami in Tashkent. (Tashkentskiy gosudarstvennyy pedagogicheskiy institut imeni Nizami)

PRESENTED : March 7, 1957, by Vinogradov, I.M., Academician

SUBMITTED : March 4, 1957

AVAILABLE: Library of Congress.

Card 2/2

LAVRITK, A. F., Cand Phys-Math Sci -- (diss) "Certain problems  
of the additive theory of numbers." Tashkent, Publication of  
Acad Sci Uzbek SSR, 1958. 10 pp (Min of Higher Education USSR,  
Central Asian State Univ im V. I. Lenin), 150 copies (KL, 18-  
58, 95)

-8-

AUTHOR:

Lavrik, A.F.

20-119-6-7/56

TITLE:

Addition of a Prime Number With a Prime Power of a Given Prime Number (Slozheniye prostogo chisla s prostoy stepen'yu zadannogo prostogo)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 119, Nr 6, pp 1085-1087 (USSR)  
 ABSTRACT: Theorem: Let  $Q(p_2, N)$  be the number of all numbers  $n \leq 2N$  which are representable in the form

$$(1) \quad n = p_1 + p_2^{p_3},$$

where  $p_1, p_2, p_3$  are prime numbers, and  $p_1 \leq N$ ,  $p_2 \leq N$ . Let  $F(p_2, N)$  be the number of those of these numbers  $n$  which admit only one unique representation (1). Then it is

$$Q(p_2, N) = \frac{N}{\ln p_2 \cdot \ln \ln N} + O\left(\frac{N \ln \ln \ln N}{\ln p_2 \cdot \ln^2 \ln N}\right)$$

$$F(p_2, N) \sim Q(p_2, N).$$

Card 1/2

Theorem: Let  $J_k(a, N)$  be the number of those  $n \leq 2N$  which are

Addition of a Prime Number With a Prime Power of a Given Prime Number 20-119-6-7/56

representable in the form

$$(2) \quad n = p + a^m,$$

where  $p$  is a prime number,  $a \geq 2$  integer and  $m=1^k, 2^k, \dots; k \geq 2$  and integer. Let  $G_k(a, N)$  be the number of the  $n$  with a unique representation (2). Then it is

$$G_k(a, N) \sim J_k(a, N)$$

$$J_k(a, N) = \frac{N}{(\ln N)^{1-1/k} \ln^{1/k} a} + O\left(\frac{N}{\ln^{1-\varepsilon} N \cdot \ln^{1/k} a}\right),$$

where  $\varepsilon > 0$  denotes arbitrarily small constants.  
There are 4 references, 3 of which are Soviet, and 1 German.

**ASSOCIATION:** Tashkentskiy gosudarstvennyy pedagogicheskiy institut imeni Nizami (Tashkent State Pedagogical Institute imeni Nizami)

**PRESENTED:** December 19, 1957, by I.M. Vinogradov, Academician

**SUBMITTED:** December 16, 1957

Card 2/2

16(1)

AUTHOR:

Lavrik, A.F.

SOV/166-59-1-10/11

TITLE:

On the Distribution Problem of the Values of the Class Numbers  
 of Quadratic Forms With a Negative Determinant (K probleme  
 raspredeleniya znacheniy chisla klassov chisto korennykh  
 kvadratichnykh form otritsatel'nogo opredelitelya)

PERIODICAL:

Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-  
 matematicheskikh nauk, 1959, Nr 1, pp 81-90 (USSR)

ABSTRACT:

The author uses the results of I.M.Vinogradov [Ref 2] in  
 order to prove the following formulas:

$$\sum_{\Delta \leq N} h^2(-\Delta) = \frac{36}{29\pi^2} N^2 \sum_{n=1}^{\infty} \frac{\varphi(n)\tau(n^2)}{n^3} + O(N^{1.75+\epsilon}),$$

$$\sum_{\Delta \leq N} h^3(-\Delta) = \frac{16}{5\pi^3} N^{5/2} \sum_{n=1}^{\infty} \frac{\varphi(n)\tau^3(n^2)}{n^3} + O(N^{2.4+\epsilon}),$$

$$\lim_{N \rightarrow \infty} \frac{Q}{N} > \frac{5x^2 - 1}{5x^2}.$$

Card 1/2

On the Distribution Problem of the Values of the Class SOV/166-59-1-10/11  
Numbers of Quadratic Forms With a Negative Determinant

Here  $h(-\Delta)$  is the class number of purely quadratic forms with the determinant  $-\Delta$ ,  $\Delta \geq 1$  and integral,  $\varphi(n)$  is the Eulerian function,  $T_i(m)$  is the number of integral solutions of the equation  $m = k_1 \dots k_i$ ,  $T_2(m) = T(m)$ , the accent in the second sum denotes the summation with respect to odd  $n$ ,  $Q$  is the number of integers  $\Delta \leq N$  for which  $\alpha(x)\sqrt{\Delta} < h(-\Delta) < \beta(x)\sqrt{\Delta}$ ,  $\alpha(x) = \frac{2\pi}{7\zeta(3)} - \frac{2}{\pi}x$ ,  $\beta(x) = \frac{2\pi}{7\zeta(3)} + \frac{2}{\pi}x$ ,  $\zeta(m)$  is the zeta function. The author mentions Yu.V.Linnik, N.G.Chudakov, A.G. Postnikov, K.K.Rodoskiy.

There are 13 references, 8 of which are Soviet, 2 German, and 3 English.

ASSOCIATION: Tashkentskiy institut inzhenerov zheleznyodorozhnogo transporta  
(Tashkent Institute of R/R Engineers)

SUBMITTED: July 15, 1958

Card 2/2

16(1)

AUTHOR: Lavrik, A.F.

SOV/42-14-1-15/27

TITLE: On a Theorem of the Additive Number Theory (Ob odnom predlozhenii  
additivnoy teorii chisel )

PERIODICAL: Uspekhi matematicheskikh nauk, 1959, Vol 14, Nr 1, pp 197-198 (USSR)

ABSTRACT: In connection with the results of Yu.V.Linnik [Ref 1,2] and  
N.P.Romanov [Ref 3] the following conjecture was formulated:  
There exists a fixed number k so that "almost" all even (or odd)  
numbers can be represented in the form

$$(1) \quad p + g^{x_1} + \dots + g^{x_k},$$

where p is a prime number and  $g \geq 2$ ,  $x_i \geq 1$  are integral (i.e.

the asymptotic density of the sequence of all integers  
representable in the form (1) is  $\frac{1}{2}$ ). The author shows that  
this conjecture is always wrong for  $g \neq 2$ .

There are 3 Soviet references.

SUBMITTED: September 7, 1957

Card 1/1

1

16(1)

AUTHOR: Lavrik, A. F. SOV/43-59-19-1/14  
 TITLE: Estimation of Some Integrals Combined With Additive Problems  
 PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki,  
 mekhaniki i astronomii, 1959, Nr 19(4), pp 5-12 (USSR)

ABSTRACT: Theorem 1: Let  $p$  be a prime number,  $\vartheta \in (0, 1)$  and

$$S(\vartheta, N) = \sum_{p \leq N} e^{2\pi i \vartheta p}.$$

For all  $1 > \delta > \gamma \geq 0$  satisfying the condition  $0 < \delta - \gamma \leq 1$  it holds:

$$\int_{\gamma}^{\delta} |S(\vartheta, N)|^2 d\vartheta = (\delta - \gamma) \frac{N}{\ln N} + O\left(\frac{N \ln^2 \ln N}{\ln^2 N}\right).$$

Theorem 2: Let  $\Delta(n)$  be the Mangold-function and

$$S_1(\vartheta, N) = \sum_{n=1}^{\infty} e^{-\frac{n}{N}} e^{2\pi i \vartheta n} \Delta(n).$$

Then under the assumptions of theorem 1 it holds:

Card 1/2

Estimation of Some Integrals Combined  
With Additive Problems

SOV/43-59-19-1/14

$$\int_{-\delta}^{\delta} |S_1(\xi, N)|^2 d\xi = \frac{1}{2} (\xi - \gamma) N \ln N + O(N \ln^2 \ln N).$$

Theorem 3: Let  $x$  be integral,  $\notin (0, 1)$  and

$$T(-\theta, N) = \sum_{\substack{1 \leq x^2 \leq N \\ 1 \leq x \leq N}} e^{2\pi i \theta x^2}.$$

Then for all  $1 \geq \delta > \theta \geq 0$ ,  $0 < \xi - \gamma \leq 1$ :

$$\int_{-\delta}^{\delta} |T(\xi, N)|^2 d\xi = (\xi - \gamma) \sqrt{N} + O(\ln^2 N).$$

The proofs are based on a combination of the methods of I.M. Vinogradov  
and Viggo Brun.

The author thanks Yu.V. Linnik, Corresponding Member of the AS USSR,  
for suggesting the problem and advice. The author mentions L.G.

Schnirel'man.

There are 4 references, 3 of which are Soviet, and 1 English.

SUBMITTED: March 5, 1958

Card 2/2

LAVRIK, A.F.

Binary hypothesis in the theory of prime numbers according to  
I.M. Vinogradov. Dokl.AN SSSR 132 no.5:1013-1015 Je '60.  
(MIRA 13:6)

(Numbers, Prime)

81390

16.1000

AUTHOR: Lavrik, A.F.S/020/60/132/06/09/068  
C111/C222

TITLE: Distribution of k - Twins of Primes

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 6, pp. 1258-1260

TEXT: Theorem 2 : For almost all neighboring pairs  $[p_{ki}; p_{ki} + 2k]$ ,  $[p_{k(i-1)}; p_{k(i-1)} + 2k]$  of k - twins of primes of the interval  $(0, x)$ ,for all  $2 \leq 2k \leq \frac{x}{\ln x}$  with an exception of at most  $\frac{c x}{(\ln x)^M}$  of them, where  $M > 1$  is fixed and arbitrary and c depends only on M it holds the inequation

$$|p_{ki} - p_{k(i-1)}| > \frac{\ln^2 p_{ki}}{\alpha_k \cdot \omega(p_{ki})}, \quad \alpha_k = \prod_{\substack{p/k \\ p>5}} \frac{p-2}{p-4},$$

where  $\omega(t) \rightarrow \infty$  is an arbitrary function so that  $\frac{\ln^2 t}{\omega(t)}$  increases monotonely and p runs through the prime divisors of k .

Card 1/3

X

81390

Distribution of k - Twins of Primes

S/020/60/132/06/09/068  
C111/C222

Theorem 3 : Let  $x > x_0$  ;  $E(x) = \frac{\ln^2 x}{\omega(x)}$  ;  $0 < D(x) \leq E(x)$ , where  $\omega(x) \rightarrow \infty$   
 for  $x \rightarrow \infty$ . Then for almost every integral  $2 \leq 2k \leq \frac{x}{\ln x}$  there exist

$$N = \left[ \alpha_k \frac{\ln^2 x}{D(x)} \right] , \quad \alpha_k = B \prod_{\substack{p/k \\ p > 3}} \frac{p-4}{p-2} ,$$

successive pairs

$$[p_{ki} ; p_{ki} + 2k], \dots, [p_{k(i+N)} ; p_{k(i+N)} + 2k]$$

of k - twins of primes in the interval  $(0, x)$  with the property that

$$p_{k(i+s)} - p_{k(i+s-1)} > D(x) , \quad s = 1, 2, \dots, N ,$$

where  $B > 0$  is an absolute constant.

Theorem 1 is contained in theorem 2.

Card 2/3

4

Distribution of k - Twins of Primes

81390

S/020/60/132/06/09/068  
C111/C222

The proofs base on the application of the method of trigonometric sums of I.M. Vinogradov and the sieve of A. Selberg.

There are 3 references : 2 Soviet and 1 Hungarian.

PRESENTED: February 25, 1960, by I.M. Vinogradov, Academician

SUBMITTED: February 24, 1960

Card 3/3

X

LAVRIK, A.F.

Theory of the distribution of sets of primes with given differences  
between them. Dokl. AN SSSR 138 no.6:1287-1290 Je '61.  
(MIRA 14:6)

1. Matematicheskiy institut im. V.A.Steklova AN SSSR. Predstavлено  
академиком I.M.Vinogradovym.  
(Numbers, Prime)

LAVRIK, A.F.

Numbers of k-twins of prime numbers lying on the segment of a  
given length. Dokl. AN SSSR 136 no.2:281-283 '61. (MIRA 14:1)

1. Predstavleno akademikom I.M. Vinogradovym.  
(Numbers, Prime)

LAVRIK, A.F.

Binary problems in the additive theory of prime numbers in  
connection with I.M. Vinogradov's method of trigonometric sums  
[with summary in English]. Vest. LGU no.13:11-27 '61. (MIRA 14:7)  
(Numbers, Theory of)

LAVRIK, A.F.

Binary case of an additive problem involving squares of primes.  
Dokl. AN SSSR 140 no.3:529-532 S '61, (MIRA 14:9)

1. Matematicheskiy institut im. V.A. Steklova AN SSSR. Predstavлено  
академиком I.M. Vinogradovym.  
(Numbers, Theory of)

LAVRIK, A.F.

Theory of the distribution of prime numbers based on I.M.Vinogradov's method of trigonometric sums. Trudy Mat.inst. 64:90-125  
'61. (MIRA 15:3)

(Numbers, Prime)

LAVRIK, A.F.

Representation of numbers as the sum of prime numbers by L. G.  
Shnirel'man's method. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk 6  
no.6:5-10 '62. (MIRA 15:8)

1. Institut matematiki imeni V.I.Romanovskogo AN UzSSR.  
(Numbers, Theory of)

LAVRIK, A.F.

Theory of quasi-simple numbers. Dokl. AN SSSR 152 no.3:544-547  
S '63. (MIRA 15:12)

1. Predstavleno akademikom I.M.Vinogradovym.

LAVRIK, A.F.

Sums over the characters of the module powers of Dirichlet  
L-functions in the critical band. Dokl. AN SSSR 154 no.1:  
34-37 Ja'64. (MIRA 17:2)

1. Predstavлено академиком I.M. Vinogradovym.

LAVRIK, A.P.

The problem of divisors in members of arithmetical progressions.  
Dokl. AN SSSR 164 no.6:1232-1234. C '65.

(MIRA 18:10)

1. Submitted April 5, 1965.

LAVRIK, A.F.

Shortened functional equation for Dirichlet L-functions. Izv.  
AN SSSR, Ser. mat., nauk 9 no. 4:17-22 (65).

(MZhR 18:9)

], Tashkentskoye vysheye obshchevoyskovoje komandnuye uchilishche  
imeni Lenina,

I. 34030-66 EWT(d)/T IJP(c)  
ACC NR: AF6025495

SOURCE CODE: UR/0038/66/030/002/0433/0448

AUTHOR: Lavrik, A. F.

23

ORG: none

B

TITLE: Functional equation for Dirichlet L-functions and the divisor problem in arithmetic progressions

16

SOURCE: AN SSSR. Izvestiya. Seriya matematicheskaya, v. 30, no. 2, 1966, 433-448

TOPIC TAGS: Dirichlet problem, functional equation

ABSTRACT: The article presents a new form of functional equation for Dirichlet L-functions and considers the divisor problem in the terms of an increasing arithmetic progression. Orig. art. has: 39 formulas. [JPRS: 36,775]

SUB CODE: 12 / SUBM DATE: 21May65 / ORIG REF: 005 / OTH REF: 001

Card 1/1 pta)

UDC: 511  
0916 0874

LAVRIK, Aleksandr Grigor'yevich; BERLIN, S.G., red.; KLAPTSOVA, T.F.,  
tekhn, red.

[Beyond the Arga-Tas Mountains] Za khrebtami Arga-Tasa. Moskva,  
Sovetskaia Rossiia, 1963. 111 p.

(MIRA 16:6)

(Nelemnoye --- Yukaghir)

LAVRIK, D.K.

Temperature effect on the appearance of the crystalline  
structure of chromium coatings. Trudy LIEI no.29:70-73 [i.e. 39]  
'62. (MIRA 16:6)  
(Chromium plating) (X-ray diffraction examination)

ACC NR: AP6036171

(A)

SOURCE CODE: UR/0209/66/000/011/0036/0042

AUTHOR: Gudzev, N. (Colonel; Candidate of technical sciences); Lavrik, G. (Colonel; Doctor of military sciences); Perepelitskiy, S. (Engineer; Colonel; Candidate of technical sciences); Sokolkin, N. (Engineer; Major; Candidate of technical sciences)

ORG: none

TITLE: Planning operations in aviation headquarters

SOURCE: Aviatsiya i kosmonavtika, no. 11, 1966, 36-42

TOPIC TAGS: job analysis, ~~organization coordination planning~~, operations research, PERT, economic planning, industrial management, air force organization

ABSTRACT: A method of preparing a functional plan of operations is described in detail. It is said that the flow diagrams and outlines currently being prepared by commanders and officers at aviation headquarters have certain shortcomings, such as poor estimation of the time required for each operation, lack of coordination between sections, and no visual means for timely detection and elimination of potential difficulties. Many of these problems can be eliminated by adapting methods of network planning and management (SPU), which are widely used in the national economy. In this case the planned process is broken down into individual tasks. Each task is performed in phases which are called events and are designated by the resultant term, such as "aircraft fueled," "decision made." Consequently, each event expresses some important moment in the realization of the planned action.

Card 1/2

ACC NR: AP6036171

Events are logically related to each other by means of tasks which actually transform one event into another. The task or operation means a working process which utilizes time and materials; "fictional work" means either a rest period or an enforced waiting period, which takes time but does not produce. On the basis of this terminology, flow charts of such planning are presented and methods of computation for determining the time allotment for each task are given. It is said that such graphic plans can be prepared well ahead of time not only for such stationary processes as actions during alert, preparation for second flight mission, retraining of a flight crew, etc, but also for such highly dynamic processes as the organization of activities during training under various circumstances. Experience with this type of planning should result in the preparation of standard plans which are periodically revised, and in the capability for estimating work capacity and anticipating difficulties in certain cases.

SUB CODE: 05, 12, 01/ SUBM DATE: none

Card 2/2

NADAREYSHVILI, D.P.; LAVRIK, G.F.; KAMYMIN, V.I.

Work practices of the V.N.Konov brigade in a longwall equipped  
with a UKR-1 cutter-loader. Ugol' 40 no. 3:13-14 Mr '65.

1. Normativno-issledovatel'skaya stantsiya tresta Krasnoluchugol'.

(MIRA 18:4)

L 53753-65 ExT(m)/ExF(t); LWP(t) - 1117 - 3D  
ACCESSION NR: AP5012826

UR/0360/65/000/001/0012/0018

AUTHOR: Kozin, L. F.; Lavrik, I. V.; Bukhman, S. P.

TITLE: Cementation of indium by zinc amalgam in a multicompartment amalgamator with circulating electrolyte 11 11 10

SOURCE: AN KazSSR. Izvestiya. Seriya khimicheskikh nauk, no. 1, 1965, 12-15

TOPIC TAGS: indium recovery, zinc amalgam, precipitation

ABSTRACT: A four-compartment amalgamator with circulating electrolyte containing 9-10 g/l of metallic indium, 100 g/l NaCl, 100 and 75 g/l HCl (composition of the cementing industrial) were used to study the cementation of indium by zinc amalgam in NaCl-HCl solutions. Each compartment contained 50 ml of saturated zinc amalgam. After the cementation, the indium present in the solutions was titrated with standard B. The recovery of indium carried out in this manner can be calculated by the following formula:

$$n = \frac{(1 - x^2)}{C_0} \cdot 100\%$$

where  $x = C_1$  is the fraction of indium which does not undergo phase exchange

Card 1/2

I 53753-65

ACCESSION NR: AP5012826

of the amalgamator compartments,  $C_0$  is the initial indium concentration in the solution for the given compartment,  $C_1$  is the indium concentration in the solution after the phase exchange,  $n$  is the number of compartments in the amalgamator. The calculated values agreed well with experimental data. The authors also studied the recovery of indium as a function of the rate of stirring of the amalgam and as a function, and as a function of the flow rate; the reaction rate was found to increase with the stirring rate. The cementation rate depends strongly on the electrode composition. Optimum conditions for indium recovery were determined. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 11Jun64

ENCL: 00

SUB CODE: 00

NO REF Sov: 005

OTHER: 001

y & S  
Caro 2/2

BAGRYANSKIY, K.V.; KAL'YANOV, V.N.; LAVRIK, P.F.

Flaking of chromium steel layers deposited on 55Kh and 60KhG steel.  
Avtom. svar. 16 no.9:26-30 S '63. (MIRA 16:10)

1. Zhdanovskiy metallurgicheskiy institut.

BAGRYANSKIY, K.V.; LAVRIK, P.F.; KAL'YANOV, V.N.

Ceramic fluxes with an iron powder. Avtom. svar. 16 no.10:  
43-46 O '63. (MIRA 16:12)

1. Zhdanovskiy metallurgicheskiy institut.

BAGRYANSKIJ, K. V., kand. tekhn. nauk; LAVRIK, P. F., inzh.

Alloying the metal of drops in welding under ceramic flux.  
Svar. protiv. no. 5r7-11 My '64. (MIR. 18/11)

I. Shchelkovskiy metallurgicheskiy institut.

LAVRIK, F.F. (Ust'-Kamenogorsk)

Method of setting up problems in physics lessons. Fiz. v shkole  
22 no.2:75-76 Mr-Ap '62. (MIRA 15:11)  
(Physics--Study and teaching)

MOROZOV, Nikolay Viktorovich, doktor tekhn. nauk; ARBUZOV, Nikolay Terent'yevich, kand. tekhn. nauk; GROMOV, Vasiliy Lukich kand. tekhn. nauk [deceased]; KALISHUK, Aleksandr Luk'yanovich, kand. tekhn. nauk; KURBATOV, Dmitriy Ivanovich, kand. tekhn. nauk; PILYUGIN, Mikhail Semenovich, kand. tekhn. nauk; KHUTORANSKIY, Aleksandr Abramovich, kand. tekhn. nauk; SHERENTSIK, Aleksandr Abramovich, kand. tekhn. nauk; LAVRIK, Gennadiy Ivanovici, arkh. MADERA, Georgiy Il'ich, inzh.; PINSKIY, Yeim Aronovich, inzh.; SHKLYAR, Aleksandr Samoylovic, inzh.; BERGER, K.V., red.; VISHNEVYY, V.V., red.; ISHCHENKO, N.S., red.

[Manual on civil engineering] Spravochnik po grazhdanskому stroitel'stvu. Izd.5., perer. i dop. Kiev, Budivel'nyk, 1965. 2 v. (MIRA 18:2)

LAVRIK, L.N.; POTAPOVA, L.I.

Calculation device for processing the results of quantitative  
spectral analysis. Zav.lab. 28 no.7:878-880 '62 (MIRA 15:6)  
(Spectrum analysis)

MALINOVSKIY, V.G., inzh.; PONOMARENKO, A.A., inzh.; BER, Z.I., inzh.  
[deceased]; SLOBODCHIKOV, Ye.L., inzh.; LAVRIK, P.F., inzh.;  
prinimal uchastie Nizin, N.I., tekhnik

Automatic built-up welding of iron mill rolls. Svar.proizv.  
no.7:24-26 Jl '60. (MIRA 13:7)

1. Yenakiyevskiy metallurgicheskiy zavod (for Malinovskiy,  
Ponomarenko, Ber). 2. Zhdanovskiy metallurgicheskiy institut  
(for Slobodchikov, Lavrik). 3. Prokatnaya laboratoriya  
Yenakiyevskogo metallurgicheskogo zavoda (for Nizin).  
(Rolls (Iron mills)--Maintenance and Repair)  
(Electric welding)

BAGRYANSKIY, K.V., kand.tekhn.nauk; LAVRIK, P.F., inzh.;  
KAL'YANOV, V.N., inzh.

Effect of repeated built-up welding of iron mill rolls on  
their wear resistance. Svar. proizv. no.8:15-17 Ag '61.  
(MIRA 14:8)

1. Zhdanovskiy metallurgicheskiy institut.  
(Rolls (Iron mills)--Maintenance and repair)

BAGRYANSKIY, K.V., kand.tekhn.nauk; LAVRIK, P.F., inzh.

Mechanism of alloying metal drops in welding under a ceramic flux.  
Svar. proizv. no.10:13-15 0 '63. (MIRA 16:11)

LAVRIK, P. I.

Apple

"Developing new resistant varieties of apples." P. I. Lavrik. Reviewed by F. K. Teterov. Sad i og., no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ 1953, Unclassified.

LAVRIK, P. I.

Producing vegetative hybrids in apples. Bot.zhur. 39 no.5:734-743 S-0  
'54. (MLRA 7:11)

1. Leningradskaya zonal'naya plodovo-yagodnaya optytnaya stantsiya  
Nauchno-issledovatel'skogo instituta plodovodstva im. I.V.Michurina.  
(Apple)

LAVRIK, P.I.; RYBITSKIY, N.A.; KRYUKOV, Fedor Aksent'yevich

[The fruit and berry orchard; a reference book] Plodovy i iagodnyi  
sad; nastol'naia kniga sadovoda. [Leningrad] Leningradskoe gazetno-  
zhurnal'noe i kn-vo, 1955. 275 p. (MLRA 9:10)  
(Fruit culture)

LAVRIK, P.I.; PAVLOVA, N.M.

Fruit and berry cultures in Kaliningrad Province. Trudy Bot.inst.  
Ser.3:154-205 '56. (MIRA 9:6)  
(Kalininograd Province--Fruit culture)

LAVRIK, P.I.

An extraordinary method of criticizing. Bot. zhur. 42 no.1:107-109  
Ja '57. (MLRA 10:2)

1. Leningradskaya plodovo-yagodnaya opytnaya stantsiya Nauchno-  
issledovatel'skogo instituta plodovodstva imeni I.V. Michurina.  
(Apple) (Hybridization, Vegetable)

LAVRIK, P.I.; PASHKEVICH, A.V.

One hundredth anniversary of the birth of Vasilii Vasil'evich Pashkevich.  
Bot. zhur. 42 no.5:815-817 My '57. (MIRA 10:6)

1. Leningradskaya opytnaya stantsiya po sadovodstvu Nauchno-issledovatel'skogo instituta sadovodstva im. I.V. Michurina, g. Pavlovsk.  
(Pashkevich, Vasilii Vasil'evich, 1856-1939)

AUTHORS: Lavrik, S. N., Zabolotskiy, T. V. 76-32-5-21/47

TITLE: Spectroscopic Investigation of the High-Frequency Discharge in the Oxidation of Nitrogen (Spektroskopicheskoye issledovaniye vysokochastotnogo razryada pri okislenii azota)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 5, pp. 1081-1086 (USSR)

ABSTRACT: In the beginning investigations carried out already in this field are mentioned and explained, among them the works by Haber (Ref 1), Willey (Ref 2), Briner et al. (Ref 3), Ye. N. Yeremin, K. S. Bogomolov, N. I. Kobozev and S. S. Vasil'yev (Ref 4), and K. N. Mochalov (Ref 5). In the present work a Zeiss quartz spectrograph Q-12 was used, with the aid of which the emission spectra of the high frequency discharge in air, nitrogen, oxygen, and nitrogen oxide at various distances between the electrodes and at various velocities were investigated. The investigations showed in the spectrum of oxygen some bands of the Schuman-Ringe system, as well as those of the secondary oxygen system, atom bands of oxygen, those of the OH-radical and atom bands of copper. The occurrence of the spectral bands of the  $\gamma$ -group of nitrogen oxide, as well as of the radicals

Card 1/3

Spectroscopic Investigation of the High-Frequency Discharge in 76-32-5-21/47  
the Oxidation of Nitrogen

NH and OH in the spectrum of pure nitrogen is explained by an insufficient drying of the gases, while the occurrence of the intensive bands of cyanide is explained by the presence of carbon in the electrode holders. In the spectrum in air a dependence on the electrode distance was noticed, with, among others, spectral bands of oxygen and of the  $\gamma$ -group of nitrogen oxide having been observed which were replaced by bands of the second positive and the first negative nitrogen group in the case of the decrease of the electrode distance. Several figures of the air spectrum are given from which their non-similarity can be observed. The spectrum of nitrogen oxide is almost analogous to that of air, with a strong atomizing of the oxygen bands by nitrogen bands being observed. In order to determine the temperature of the discharge an optical method according to the bands of the elements Cu, Fe, Ba, Bi and Cu was used, with data from a work by V. G. Alekseyev and S. L. Mandel'shtam (Ref 7) being used. The obtained temperature values showed rather great differences, however, a mean value of 2500°K is assumed and the temperature differences are explained by the different temperatures in the discharge zones, and by

Card 2/3

Spectroscopic Investigation of the High-Frequency Discharge in 76-32-5-21/47  
the Oxidation of Nitrogen

a possible reabsorption respectively; on the other hand the assumed value is only to give a hint of the order of magnitude. There are 9 figures and 7 references, 4 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Khimiko-metallurgicheskiy institut,  
Novosibirsk (Novosibirsk, Chemical-Metallurgical Institute,  
AS USSR)

SUBMITTED: January 16, 1957  
1. Nitrogen--Oxidation 2. Nitrogen--Spectra  
3. Spectrophotometers--Applications

Card 3/3